CLAIMS

1.   An image generation apparatus, comprising:

one or more detectors operable to obtain readings of external conditions;

a status determination unit operable to determine a current status on the basis of readings received from said detectors;

a receiver operable to receive image data;

a selector operable to select one or more portions in an image as portions of an image which are to be emphasised wherein said selector is operable to receive status data from said status determination unit and select areas to be emphasised based on received status data; and

an image processing unit operable to process image data received by said receiver to generate a composite image in which the portions of said composite image corresponding to said portions to be emphasised selected by said selector correspond to said portions of the image defined by data received by said receiver and in which other portions of said composite image correspond to the other portions of the image defined by said data received by said receiver to which a blurring function has been applied.

2.   An image generation apparatus in accordance with claim 1 wherein said image processing unit comprises:

a blurring engine operable to generate a blurred image corresponding to an image received by said receiver; and

a composite image generator operable to generate composite images comprising portions of images selected from images defined by image data received by said receiver and portions of images generated by said blurring engine on the basis of selections of portions of an image to be emphasised made by said selector.

3.   An image generation apparatus in accordance with claim 2 wherein said blurring engine is operable to generate blurred images corresponding to images received by said receiver by deriving pixel values for pixels in a blurred image corresponding to pixels in said image defined by received image data by calculating a weighted average of received image data weighted by a function dependent upon the distance between a pixel in an image for which pixel data is being generated and a corresponding pixel in said image being utilised to calculate said weighted average.

4. An image generation apparatus in accordance with claim 3 wherein said function dependent upon distance comprises a Gaussian function.

5. An image generation apparatus in accordance with claim 1, wherein said image processing unit is operable to generate a composite image by determining pixel data for areas of an image selected by selector as portions of an image to be emphasised by copying image data for said pixels from image data received by said receiver and to determine pixel data for the remaining portions of a composite image by calculating for pixels in said remaining portions of a composite image a weighted average of received image data weighted by a function dependent upon the distance between a pixel in an image for which pixel data is being generated and a corresponding pixel in said image being utilised to calculate said weighted average.

6. An image generation apparatus in accordance with claim 5 wherein said function dependent upon distance comprises a Gaussian function.

7. An image generation apparatus in accordance with

claim 5 wherein said image processing unit comprises:

a data store storing function data defining a plurality of functions operable to derive composite image data from image data received by said receiver in which some portions of a composite image correspond to said portions of the image defined by data received by said receiver and in which other portions of said composite image correspond to the other portions of the image defined by said data received by said receiver to which a blurring function has been applied;

a selection unit operable to select function data defining a function from said data store on the basis of the one or more areas selected as portions of an image to be emphasised by said selector; and

a processing unit operable to generate a composite image utilising image data received by said receiver and function data selected by said selection unit.

8. An image generation apparatus in accordance with claim 7 wherein said selector is responsive to receipt of status data identifying a default status to cause said selector to identify the entirety of an image as being the portion of an image to be emphasised.

9.   An image generation apparatus in accordance with claim 7 further comprising:

    a display generation unit operable to generate image data defining an image identifying at least one reading obtained by said one or more detectors and to pass generated images to said receiver.

10. An image generation apparatus in accordance with claim 1 wherein said image processing unit is operable to process image data received by said receiver to generate a composite image in which portions of the image defined by data received by said receiver which do not correspond to portions to be emphasised selected by said selector correspond to said portions of the image defined by said data received by said receiver to which a number of different blurring functions have been applied.

11. An image generation apparatus in accordance with claim 10 wherein said selector is operable to associate portions of said image with data indicative of a level of importance wherein said image processing unit is operable to generate a composite image in which portions of a composite image associated with

decreasing   levels   of   importance   appear   to   be
increasingly blurred.

12. A navigation system comprising:

a route determination unit operable to calculate
a route from a present location to a desired location;

a map generation module operable to generate
image data defining a map;

a receiver operable to receive image data;

a   selector   operable   to   select   one   or   more
portions in an image as portions of an image which are
to be emphasised; and

an   image   processing   unit   operable   to   process
image data received by said receiver to generate a
composite   image   in   which   the   portions   of   said
composite image corresponding to said portions to be
emphasised selected by said selector correspond to
said portions of the image defined by data received by
said receiver and in which other portions of said
composite image correspond to the other portions of
the image defined by said data received by said
receiver to which a blurring function has been
applied, wherein said receiver is operable to receive
image data defining a map generated by said map
generation module, and said selector is operable to

select as portions of an image to be selected portions of a generated map corresponding to one or more parts of a route determined by said route determination module.

13. An image generation apparatus for generating a selectively blurred image including representations of text comprising:

a first font store storing data defining a first font;

a second font store storing data defining a second font corresponding to said first font to which a blurring function has been applied;

a display definition module operable to identify text data to be displayed;

a selection unit operable to select one or more items of text data to be displayed as text data to be emphasised; and

an image generation module operable to generate image data representing text data identified by said display definition module, wherein text data selected to be emphasised by said selection unit is displayed as text data appearing in the font defined by said first font stored by said first font store and the remaining text data is displayed as text data in the

font defined by said second font stored by said second
font store.

14.   An image generation method, comprising:

obtaining   one   or   more   readings   of   external
conditions;

determining   a   current   status   on   the   basis   of
received readings;

receiving image data;

generating selection data identifying one or more
portions in an image as portions of an image which are
to   be   emphasised   on   the   basis   of   the   determined
current status; and

processing   received   image   data   to   generate   a
composite   image   in   which   the   portions   of   said
composite   image   corresponding   to   said   portions   to   be
emphasised   identified   by   received   selection   data
correspond   to   said   portions   of   the   image   defined   by
received   image   data   and   in   which   other   portions   of
said   composite   image   correspond   to   the   other   portions
of   the   image   defined   by   said   received   image   data   to
which a blurring function has been applied.

15.   A method in accordance with claim 14 wherein said
processing received image data comprises:

generating a blurred image by processing said received image data; and

generating composite image comprising portions defined by said received image data and portions of said generated blurred image.

16. A method in accordance with claim 15 wherein generating a blurred image comprises deriving pixel values for pixels in a blurred image corresponding to pixels in said defined by received image data by calculating a weighted average of received image data weighted by a function dependent upon the distance between a pixel in an image for which pixel data is being generated and a corresponding pixel in said image being utilised to calculate said weighted average.

17. A method in accordance with claim 16 wherein said function dependent upon distance comprises a Gaussian function.

18. A method in accordance with claim 14, wherein processing received image data to generate a composite image comprises:

determining pixel data for areas of an image

identified by selection data as portions of an image to be emphasised by copying image data for said pixels from received image data; and

determining pixel data for the remaining portions of a composite image by calculating for pixels in said remaining portions of a composite image a weighted average of received image data weighted by a function dependent upon the distance between a pixel in an image for which pixel data is being generated and a corresponding pixel in said image being utilised to calculate said weighted average.

19. A method in accordance with claim 18 wherein said function dependent upon distance comprises a Gaussian function.

20. A method in accordance with claim 18 further comprising:

storing function data defining a plurality of functions operable to derive composite image data from received image data in which some portions of a composite image correspond to said portions of the image defined by received image data and in which other portions of said composite image correspond to the other portions of the image defined by said data

received by said receiver to which a blurring function
has been applied;

selecting stored function data defining a
function on the basis of received selection data; and

generating a composite image utilising received
image data and said selected function data.

21. A method in accordance with claim 14 comprising:
generating selection data in response to receipt of
status data identifying a default status identifying
the entirety of an image as being the portion of an
image to be emphasised.

22. A method in accordance with claim 20 further
comprising:

generating image data defining an image
identifying at least one obtained reading.

23. A method in accordance with any of claim 14
wherein processing image data to generate a composite
image comprises:

generating a composite image in which portions of
an image defined by received image data which do not
correspond to portions to be emphasised identified by
received selection data correspond to portions of the

image defined by said received image data to which a number of different blurring functions have been applied.

24. A method in accordance with claim 23 wherein said selection data associates portions of an image with data indicative of a level of importance wherein said processing of image data comprises generating a composite image in which portions of a composite image associated with decreasing levels of importance appear to be increasingly blurred.

25. An image generation method for generating a selectively blurred image including representations of text comprising:

storing data defining a first font;

storing data defining a second font corresponding to said first font to which a blurring function has been applied;

identifying text data to be displayed;

selecting one or more items of text data to be displayed as text data to be emphasised; and

generating image data representing said identified text wherein text data selected to be emphasised is displayed as text data appearing in the

font defined by said first font and the remaining text data is displayed as text data in the font defined by said second font.

26. A computer readable medium storing computer implementable instructions for causing a programmable computer to perform a method in accordance with claim 14.

27. A computer readable medium in accordance with claim 26 comprising a disk.

28. A disk in accordance with claim 27 comprising a magnetic, magneto-optic or optical disk.

29. A computer readable medium in accordance with claim 27 comprising an electrical signal within a computer network.

30. A security camera system, comprising:

a camera operable to obtain image data;

a processing unit operable to identify one or more areas in images obtained by said camera as being of interest; and

an image generation unit operable to process image data obtained by said camera to generate a

composite image in which the portions of said
composite image corresponding to areas of interest
identified by said processing unit correspond to said
portions of the image defined by data obtained by said
camera and in which other portions of said composite
image correspond to the other portions of the image
defined by said data received by said receiver to
which a blurring function has been applied.

31. A security camera system in accordance with claim
30 wherein said processing unit comprises:

     an identification unit operable to identify
individuals as being of interest; and

     a tracking unit operable to track portions of
images corresponding to individuals identified as
being of interest in different images in a sequence of
images obtained by said camera.

32. A security camera system in accordance with claim
30 wherein said image generation unit is operable to
process image data obtained by said camera to generate
a composite image wherein the border between areas of
a composite image corresponding to original image data
and image data to which a blurring function has been
applied is represented by on outline.

33.   A security camera system in accordance with claim
32 wherein the outline comprises an outline of a
contrasting colour to the area of an image identified
as being of interest.

34.   A security camera system, comprising:

a first camera having a first field of view;

a   second   camera   arranged   so   as   to   have
substantially the same field of view as the first
camera via a defocusing lens thereby obtaining a
blurred image of said field of view;

a processing unit operable to identify one or
more areas in images obtained by said cameras as being
of interest; and

an image generation unit operable to generate a
composite   image   in   which   the   portions   of   said
composite image corresponding to areas of interest
identified by said processing unit correspond to
portions of an image of said field of view obtained by
said first camera and in which other portions of said
composite image correspond to portions of an image of
said field of view obtained by said second camera.

35.   An gauge comprising:

a sensor operable to detect an external measurement;

a scale having a plurality of indicia of potential measurements of readings obtained by said sensor; and

a defocusing lens having a clear portion, said defocusing lens and said scale being arranged to move relatively in response to variations in readings obtained by said sensor so as to position said clear portion of said defocusing lens over the indicia of said scale corresponding to the obtained reading obtained by said sensor.

36. A method of advertising comprising:

obtaining an image;

processing said obtained image to generate a sequence of images wherein each of the images in said sequence of images comprises a composite image in which one or more portions of the image correspond to said obtained image and other portions of said composite image correspond to portions of said obtained image to which a blurring function has been applied; and

sequentially displaying said generated sequence of images.

37. An apparatus for generating a sequence of images comprising:

a image store operable to store image data;

a data store operable to store data identifying a sequence of positions within an image; and

an image processing unit operable to generate composite image in which portions of an image identified by data selected from data stored in said data store correspond to portions of the image stored in said image store and other portions in said generated image correspond to image data derived by processing corresponding portions of image data stored in said image store using a blurring function.